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**AMENDMENTS TO THE CLAIMS**

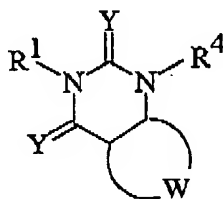
The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

**Claim 1 (cancelled).**

**Claim 2 (currently amended).**

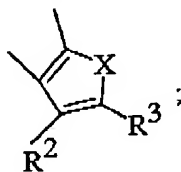
A compound of Formula XI

**XI**

or a pharmaceutically salt thereof,

wherein:

W, together with the carbon atoms to which it is attached, form a 5-membered ring diradical



each Y independently is O or S;

X is S, O, or NR<sup>5</sup>;

R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> independently are hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl,

C<sub>2</sub>-C<sub>6</sub> alkynyl, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> heterocyclic,

C<sub>1</sub>-C<sub>6</sub> alkanoyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

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$R^2$  is hydrogen, halo,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, CN,

$NO_2$ ,  $NR^4R^5$ ,  $(CH_2)_n$  cycloalkyl,  $(CH_2)_n$  aryl, or  $(CF_2)_n$  heteroaryl;

$R^3$  is hydrogen, halo,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl, CN,  $NO_2$ ,  $NR^4R^5$ ,

$(CH_2)_q$  cycloalkyl,  $(CH_2)_q$  aryl, or  $(CH_2)_q$  heteroaryl;

$n$  is 0, 1, or 2;

$q$  is 2, 3, or 4; and

$R^4$  and  $R^5$  when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that  $R^1$  and  $R^3$  are not both selected from hydrogen and  $C_1$ - $C_6$  alkyl.

**Claim 3 (currently amended).**

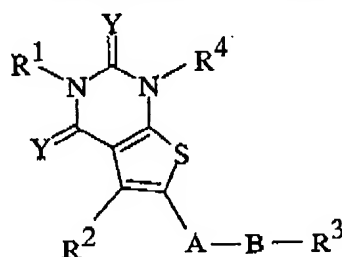
The compound according to Claim 2,

or a pharmaceutically acceptable salt thereof, wherein Y is O, and ~~X is S.~~

**Claims 4-5 (cancelled).**

**Claim 6 (original).**

A compound of Formula II



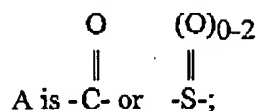
II

or a pharmaceutically acceptable salt thereof,  
wherein:

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B is O or NR<sup>5</sup>; or

A and B are taken together to form -C=C-;

each Y independently is O or S;

R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> independently are hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl,C<sub>2</sub>-C<sub>6</sub> alkynyl, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> heterocyclic,C<sub>1</sub>-C<sub>6</sub> alkanoyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;R<sup>2</sup> and R<sup>3</sup> independently are hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl,C<sub>2</sub>-C<sub>6</sub> alkynyl, CN, NO<sub>2</sub>, NR<sup>4</sup>R<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub>aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;R<sup>2</sup> may further be halo;

n is an integer of from 0 to 5; and

R<sup>4</sup> and R<sup>5</sup> when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that R<sup>1</sup> and R<sup>3</sup> are not both selected from: hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl.

**Claim 7 (original).** The compound according to Claim 6, or a pharmaceutically acceptable salt thereof, wherein -A-B- is -C=C-.

**Claim 8 (original).** The compound according to Claim 6, or a pharmaceutically acceptable salt

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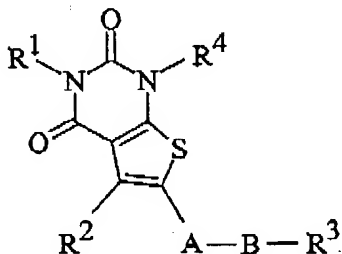
thereof, wherein A is  $-\text{C}-$  and B is  $\text{NR}^5$ , wherein  $\text{R}^5$  is hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_2\text{-C}_6$  alkenyl,  $\text{C}_2\text{-C}_6$  alkynyl,  $(\text{CH}_2)_n$  cycloalkyl,  $(\text{CH}_2)_n$  heterocyclic,  $\text{C}_1\text{-C}_6$  alkanoyl,  $(\text{CH}_2)_n$  aryl, or  $(\text{CH}_2)_n$  heteroaryl.

**Claim 9 (original).** The compound according to Claim 6, or a pharmaceutically acceptable salt



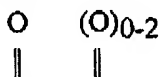
thereof, wherein A is  $-\text{C}-$  and B is O.

**Claim 10 (original).** A compound of Formula III



III

or a pharmaceutically acceptable salt thereof,  
wherein:



A is  $-\text{C}-$  or  $-\text{S}-$ ;

B is O or  $\text{NR}^5$ ; or

A and B are taken together to form  $-\text{C}\equiv\text{C}-$ ;

$\text{R}^1$ ,  $\text{R}^4$ , and  $\text{R}^5$  independently are hydrogen,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_2\text{-C}_6$  alkenyl,  $\text{C}_2\text{-C}_6$  alkynyl,  $(\text{CH}_2)_n$  cycloalkyl,  $(\text{CH}_2)_n$  heterocyclic,  $\text{C}_1\text{-C}_6$  alkanoyl,  $(\text{CH}_2)_n$  aryl, or  $(\text{CH}_2)_n$  heteroaryl;

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$R^2$  and  $R^3$  independently are hydrogen,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, CN,  $NO_2$ ,  $NR^4R^5$ ,  $(CH_2)_n$  cycloalkyl,  $(CH_2)_n$  aryl, or  $(CH_2)_n$  heteroaryl;

$R^2$  may further be halo;

$n$  is an integer of from 0 to 5; and

$R^4$  and  $R^5$  when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that  $R^1$  and  $R^3$  are not both selected from hydrogen and  $C_1$ - $C_6$  alkyl.

Claims 11-12 (cancelled).

Claim 13 (currently amended).

The compound according to Claim 1

Claim 53, selected from:

4-{6-[3-(4-Methoxy-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid;

3-(4-Methanesulfonyl-benzyl)-6-[3-(4-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;

4-{6-[3-(3-Methoxy-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid;

3-(4-Methanesulfonyl-benzyl)-6-[3-(3-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;

4-[1-Methyl-2,4-dioxo-6-(3-pyridine-4-yl-prop-1-ynyl)-1,4-dihydro-2H-thieno[2,3-*d*]pyrimidine-3-ylmethyl]-benzoic acid;

3-(4-Methanesulfonyl-benzyl)-1-6-(3-pyridine-4-yl-prop-1-ynyl)-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;

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- 4-[1-Methyl-2,4-dioxo-6-(3-pyridine-3-yl-prop-1-ynyl)-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl]-benzoic acid;
- 3-(4-Methanesulfonyl-benzyl)-1-6-(3-pyridine-3-yl-prop-1-ynyl)-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{6-[3-(4-Fluoro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
- 6-[3-(4-Fluoro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{6-[3-(3-Fluoro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
- 6-[3-(3-Fluoro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{6-[3-(4-Chloro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
- 6-[3-(4-Chloro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{6-[3-(3-Chloro-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
- 6-[3-(3-Chloro-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{6-[3-(4-Bromo-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
- 6-[3-(4-Bromo-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{6-[3-(3-Bromo-phenyl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;
- 6-[3-(3-Bromo-phenyl)-prop-1-ynyl]-3-(4-methanesulfonyl-benzyl)-1-methyl-1H-thieno[2,3-d]pyrimidine-2,4-dione;
- 4-{1-Methyl-6-[3-(4-nitro-phenyl)-prop-1-ynyl]-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidine-3-ylmethyl}-benzoic acid;

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- 3-(4-Methanesulfonyl-benzyl)-1-methyl-6-[3-(4-nitro-phenyl)-prop-1-ynyl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 4-{6-[3-(2-Methoxy-pyridin-4-yl)-prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2*H*-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid;
- 3-(4-Methanesulfonyl-benzyl)-6-[3-(2-methoxy-pyridin-4-yl)-prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 4-{1-Methyl-6-[3-(4-methylsulfanyl-phenyl)-prop-1-ynyl]-2,4-dioxo-1,4-dihydro-2*H*-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid;
- 3-(4-Methanesulfonyl-benzyl)-1-methyl-6-[3-(4-methylsulfanyl-phenyl)-prop-1-ynyl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 4-{1-Methyl-6-[3-(3-methylsulfanyl-phenyl)-prop-1-ynyl]-2,4-dioxo-1,4-dihydro-2*H*-thieno[2,3-*d*]pyrimidine-3-ylmethyl}-benzoic acid;
- 3-(4-Methanesulfonyl-benzyl)-1-methyl-6-[3-(3-methylsulfanyl-phenyl)-prop-1-ynyl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 4-[1-Methyl-2,4-dioxo-6-(3-*p*-tolyl-prop-1-ynyl)-1,4-dihydro-2*H*-thieno[2,3-*d*]pyrimidin-3-ylmethyl]benzoic acid;
- 3-(4-Methanesulfonyl-benzyl)-1-methyl-6-(3-*p*-tolyl-prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 4-[1-Methyl-2,4-dioxo-6-(3-*m*-tolyl-prop-1-ynyl)-1,4-dihydro-2*H*-thieno[2,3-*d*]pyrimidin-3-ylmethyl]benzoic acid;
- 3-(4-Methanesulfonyl-benzyl)-1-methyl-6-(3-*m*-tolyl-prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(4-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(3-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-1-methyl-6-(3-pyridin-4-yl-prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-1-methyl-6-(3-pyridin-3-yl-prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

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- 3-Benzyl-6-[3-(4-fluoro-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(3-fluoro-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(4-chloro-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(3-chloro-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(4-bromo-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(3-bromo-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(2-methoxy-pyridin-4-yl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-1-methyl-6-[3-(4-methylsulfanyl-phenyl)-prop-1-ynyl]-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-1-methyl-6-[3-(3-methylsulfanyl-phenyl)-prop-1-ynyl]-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-1-methyl-6-(3-*p*-tolyl-prop-1-ynyl)-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-Benzyl-1-methyl-6-(3-*m*-tolyl-prop-1-ynyl)-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-(3-Fluoro-benzyl)-6-[3-(4-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-(3-Fluoro-benzyl)-6-[3-(3-methoxy-phenyl)-prop-1-ynyl]-1-methyl-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-(3-Fluoro-benzyl)-1-methyl-6-(3-pyridine-4-yl-prop-1-ynyl)-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;
- 3-(3-Fluoro-benzyl)-1-methyl-6-(3-pyridine-3-yl-prop-1-ynyl)-1H-thieno[2,3-*d*]pyrimidine-2,4-dione;



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3-(3-Fluoro-benzyl)-6-[3-(4-fluoro-phenyl)-prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

3-(3-Fluoro-benzyl)-6-[3-(3-fluoro-phenyl)-prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

6-[3-(4-Chloro-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

6-[3-(3-Chloro-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

6-[3-(4-Bromo-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

6-[3-(3-Bromo-phenyl)-prop-1-ynyl]-3-(3-fluoro-benzyl)-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

3-(3-Fluoro-benzyl)-6-[3-(2-methoxy-pyridin-4-yl)-prop-1-ynyl]-1-methyl-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

3-(3-Fluoro-benzyl)-1-methyl-6-[3-(4-methylsulfanyl-phenyl)-prop-1-ynyl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

3-(3-Fluoro-benzyl)-1-methyl-6-[3-(3-methylsulfanyl-phenyl)-prop-1-ynyl]-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione;

3-(3-Fluoro-benzyl)-1-methyl-6-(3-*p*-tolyl-prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione; and

3-(3-Fluoro-benzyl)-1-methyl-6-(3-*m*-tolyl-prop-1-ynyl)-1*H*-thieno[2,3-*d*]pyrimidine-2,4-dione.

**Claim 14 (currently amended).**

The compound according to Claim 1

Claim 53, selected from:

3-(3-Methoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Methoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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- 3-Benzofuran-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-3-(4-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(4-Acetylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(4-vinyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(4-Bromo-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;
- 1-Methyl-2,4-dioxo-3-phenethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-[4-(2H-tetrazol-5-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(4-Fluoro-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;
- 3-(4-*tert*-Butyloxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(4-*tert*-Butyloxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid;
- 4-[6-(4-Fluoro-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-*d*]pyrimidin-3-ylmethyl]-benzoic acid;
- 4-[6-(4-Dimethylamino-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-*d*]pyrimidin-3-ylmethyl]-benzoic acid, compound with trifluoro-acetic acid;
- 4-[6-(2-Ethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-3-ylmethyl]-benzoic acid;

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1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid;

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[4-(1H-tetrazol-5-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-[4-(morpholine-4-sulfonyl)-benzyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-[4-(morpholine-4-carbonyl)-benzyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-But-2-ynyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[3-(1H-tetrazol-5-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

{4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-*d*]pyrimidin-3-ylmethyl]-phenyl}-acetic acid;

3-[2-(2,4-Dichloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

1-Methyl-3-(4-methylsulfamoyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Isopropylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[4-(pyrrolidine-1-sulfonyl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; and

1-Methyl-3-[4-(4-methyl-piperidine-1-sulfonyl)-benzyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide.

**Claim 15 (currently amended).**

The compound according to ~~Claim 1~~

Claim 53, selected from:

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzofuran-2-ylmethyl ester;

3-(4-Bromo-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzyl ester;

4-{1-Methyl-2,4-dioxo-6-[(pyridin-4-ylmethyl)-carbamoyl]-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl}-benzoic acid, compound with trifluoro-acetic acid;

4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

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4-[6-(3,4-Dimethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid *tert*-butyl ester;

4-[6-(3,4-Dimethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[6-(4-Bromo-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[6-(4-Bromo-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid *tert*-butyl ester;

4-[6-(3,5-Bis-trifluoromethyl-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[6-(4-Chloro-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[1-Methyl-2,4-dioxo-6-(4-sulfamoyl-benzylcarbamoyl)-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

3-(4-Fluoro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(4-Iodo-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Dimethylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(3-Methoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(4-Acetylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

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5-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-furan-2-carboxylic acid ethyl ester;

3-(4-Cyano-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester;

1-Methyl-2,4-dioxo-3-[4-(5-thioxo-4,5-dihydro-1,2,4-oxadiazol-3-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid 2-dimethylamino-ethyl ester;

3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzyl amide;

3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid furan-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pentafluorophenylmethyl ester;

3-Benzyl-1-ethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-cyclopropylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (pyridin-4-ylmethyl)-amide

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-bromo-benzyl ester;

4-[6-(3-Difluoromethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

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4-[6-(3-Difluoromethoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid tert-butyl ester;

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[6-(4-Methanesulfonyl-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid tert-butyl ester;

4-[6-(4-Methanesulfonyl-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

4-[1-Methyl-2,4-dioxo-6-(2-pyridin-4-yl-ethylcarbamoyl)-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid;

1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;

3-(2,3-Dihydro-benzofuran-6-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide

1-Methyl-3-(2-methyl-thiazol-5-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide

1-Methyl-2,4-dioxo-3-[4-(1H-tetrazol-5-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-fluorobenzenzylamide;

3-Benzyl-2-methoxy-4-oxo-3,4-dihydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

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4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid 2,2-dimethyl-propionyloxymethyl ester;

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-cyclohexanecarboxylic acid;

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-cyclohexanecarboxylic acid methyl ester;

1-[4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl]-cyclopropanecarboxylic acid methyl ester;

1-[4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl]-cyclopropanecarboxylic acid *tert*-butyl ester;

1-[4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenyl]-cyclopropanecarboxylic acid;

2-[4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenoxy]-2-methyl-propionic acid *tert*-butyl ester;

2-[4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-phenoxy]-2-methyl-propionic acid;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Methoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;



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3-Biphenyl-4-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(4-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-phenethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Amino-6-phenylamino-1,3,5-triazin-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-trifluoromethyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(6-Cyano-hexyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(2,5-Dimethoxy-phenyl)-2-oxo-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Iodo-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(3-trifluoromethyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(2,4-Bis-trifluoromethyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(1,3-Dioxo-1,3-dihydro-isoindol-2-yl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

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3-[2-(1,3-Dioxo-1,3-dihydro-isoindol-2-yl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Carboxy-allyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Carboxy-allyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Amino-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(1,3-Dioxo-1,3-dihydro-isoindol-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Fluoro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-oxiranylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-((S)-2-methyl-butyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-phenoxy-butyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(3-phenoxy-propyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Hex-5-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-pyridin-3-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-Hydroxy-3-(naphthalen-1-yloxy)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

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- 1,3-Dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Cyclobutylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Allyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-prop-2-ynyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-But-2-ynyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-((R)-3-Hydroxy-2-methyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Isobutyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(6-Chloro-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(2-Benzenesulfonylmethyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-3-naphthalen-1-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(2-trifluoromethyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(3-Chloro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(4-Methoxycarbonyl-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

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- 3-Ethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-fluoro-benzyl ester;
- 3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(2-Acetoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-phenoxy-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,6-dichloro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid butyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,3-dihydro-1,4-benzodioxin-2-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-diethylamino-1-methyl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-fluoro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-isopropyl-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-*p*-tolyl-ethyl ester;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzyl ester

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid cyclobutylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,6-difluoro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-(2-hydroxy-phenyl)-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-(2-hydroxy-phenyl)-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 1-methyl-piperidin-4-yl ester

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 1-methyl-piperidin-4-yl ester

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pyridin-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-pyridin-3-yl-propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-dimethylamino-1-methyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid tetrahydro-pyran-4-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,2,2-trifluoro-1-trifluoromethyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-trifluoromethyl-benzyl ester;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-benzyloxy-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,2,2-trichloro-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid phenethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-ethyl-oxetan-3-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-morpholin-4-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-pyrrolidin-1-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-(2-ethoxy-ethoxy)-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid tetrahydro-pyran-2-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-nitro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pentyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-phenyl-propyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-phenoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,5-dimethoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methyl-butyl ester;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-chloro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 1-ethyl-piperidin-3-yl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-benzyloxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid isobutyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-(4-methoxy-phenyl)-propyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-chloro-6-fluoro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (S)-(tetrahydro-furan-3-yl) ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-pyridin-2-yl-propyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-piperidin-2-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 5-bromo-2-methoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid cycloheptylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 1,2,3,4-tetrahydro-naphthalen-1-yl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (S)-1-pyrrolidin-2-ylmethyl ester;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-chloro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 1,3-benzodioxol-5-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methylsulfanyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methylsulfanyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,4-dichloro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,3-diphenyl-propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-pyridin-2-yl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid furan-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid but-3-enyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-cyano-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-ethoxy-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid cyano-phenyl-methyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methyl-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid phenethyl-amide;



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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid cyclopropylamide;

1-Methyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(3-oxo-3-phenyl-propyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[4-(N-Hydroxycarbamimidoyl)-benzyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[4-(5-oxo-4,5-dihydro-1,2,4-oxadiazol-3-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[4-(5-thioxo-4,5-dihydro-1,2,4-oxadiazol-3-yl)-benzyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

4-(5-Isopropyl-2H-pyrazol-3-yl)pyridine;

3-Cyanomethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

(E)-4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-but-2-enoic acid methyl ester;

(E)-4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-but-2-enoic acid;

3-(2-Benzenesulfonyl-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

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2-Methoxy-4-[6-(4-methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;

3-(2-Methoxymethyl-1,1,3-trioxo-2,3-dihydro-1H-1<sup>6</sup>,1,2-benzisothiazol-6-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-oct-2-ynyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Chloro-benzenesulfonylamino)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[2-(4-Fluoro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Fluoro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

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4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-2-methyl-benzoic acid methyl ester;

4-[6-(4-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;

2-Methoxy-4-[6-(3-methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-benzoic acid methyl ester;

4-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-2-methyl-benzoic acid methyl ester;

1-Methyl-2,4-dioxo-3-(3-oxo-3-phenyl-propyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Chloro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(3-trifluoromethyl-benzenesulfonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(3-trifluoromethyl-benzenesulfonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; and

3-(2-Amino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide.

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**Claim 16 (currently amended).**The compound according to ~~Claim 1~~Claim 53, selected from:

1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid;

4-(6-Carbamoyl-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl)-2-methyl-benzoic acid;

4-(6-Carbamoyl-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl)-2-methyl-benzoic acid methyl ester;

4-[6-(3-Hydroxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-2-methyl-benzoic acid;

4-(6-Carbamoyl-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl)-2-hydroxy-benzoic acid;

3-(2-Amino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide; and

4-(2,5-Di-pyridin-4-yl-thiophen-3-yl)-benzaldehyde.

**Claim 17 (currently amended).**The compound according to ~~Claim 1~~Claim 53, selected from:

1-Methyl-2,4-dioxo-3-(1-phenyl-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(3-oxo-3-phenyl-propyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-((S)-3,7-Dimethyl-oct-6-enyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(2-Ethyl-hexyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(5-Cyano-pentyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

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3-(E)-But-2-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-  
thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-(2-naphthalen-1-yl-ethyl)-2,4-dioxo-1,2,3,4-  
tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-  
benzylamide;

1-Methyl-2,4-dioxo-3-(E)-pent-2-enyl-1,2,3,4-tetrahydro-  
thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenylsulfonyl-ethyl)-1,2,3,4-tetrahydro-  
thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-sec-Butyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-  
d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-(2-methyl-allyl)-2,4-dioxo-1,2,3,4-tetrahydro-  
thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(1-Ethyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-  
thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-pent-2-ynyl-1,2,3,4-tetrahydro-thieno[2,3-  
d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(2-Benzenesulfonyl-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-  
tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-  
benzylamide;

1-Methyl-3-(3-methyl-but-2-enyl)-2,4-dioxo-1,2,3,4-tetrahydro-  
thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Fluoro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-  
1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-  
benzylamide;

1-Methyl-2,4-dioxo-3-[2-(toluene-4-sulfonyl)-ethyl]-1,2,3,4-  
tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-  
benzylamide;

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3-[3-(4-Fluoro-phenyl)-3-oxo-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[3-(4-Chloro-phenyl)-3-oxo-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-(2-Benzoylamino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

3-Benzofurazan-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

{5-[6-(4-Methoxy-benzylcarbonyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-isoxazol-3-yl}-carbamic acid methyl ester;

3-Benzyloxycarbonylamino-5-[6-(4-methoxy-benzylcarbonyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-4-oxo-pentanoic acid *tert*-butyl ester;

3-[2-(4-Chloro-phenylsulfanyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(1-phenyl-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(E)-pent-2-enyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

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3-(2-Ethyl-hexyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenylmethanesulfonyl-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(5-Cyano-pentyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(E)-But-2-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(2-naphthalen-1-yl-ethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(E)-pent-2-enyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenylsulfonyl-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-sec-Butyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(2-methyl-allyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(1-Ethyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-pent-2-ynyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(3-methyl-but-2-enyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(toluene-4-sulfonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

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3-(2-Benzoylamino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[2-(4-Bromo-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-Benzofurazan-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

{5-[6-(3-Methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-ylmethyl]-isoxazol-3-yl}-carbamic acid methyl ester; and

3-Benzylloxycarbonylamino-5-[6-(3-methoxy-benzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-thieno[2,3-d]pyrimidin-3-yl]-4-oxo-pentanoic acid *tert*-butyl ester.

**Claim 18 (currently amended).**

The compound according to ~~Claim 1~~

Claim 53, selected from:

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Pyridyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Pyridyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (4-pyridyl) ester;



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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-  
*d*]pyrimidine-6-carboxylic acid (4-pyridyl) ester;
- 3-(4-Pyridyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-  
*d*]pyrimidine-6-carboxylic acid (4-pyridyl) ester;
- 3-(4-Pyridyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]-  
pyrimidine-6-carboxylic acid (4-pyridyl) ester;
- 3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-  
6-carboxylic acid piperoyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-  
*d*]pyrimidine-6-carboxylic acid piperoyl ester;
- 3-Piperoyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-  
6-carboxylic acid piperoyl ester;
- 3-Piperoyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]-  
pyrimidine-6-carboxylic acid piperoyl ester;
- ~~3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3-  
*d*]pyrimidine-6-carboxylic acid benzyl ester;~~
- ~~3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*-pyrrolo[2,3-  
*d*]pyrimidine-6-carboxylic acid benzyl ester;~~
- ~~3-Benzyl-1,7-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*-  
pyrrolo[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;~~
- ~~3-Benzyl-1,7-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*-  
pyrrolo[2,3-*d*]pyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester;~~
- ~~3-Benzyl-1-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1*H*-pyrrolo[2,3-  
*d*]pyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester;~~
- ~~3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3-  
*d*]pyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester.~~
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-  
*d*]pyrimidine-6-carboxylic acid benzofuran-6-ylmethyl ester

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~~3-Benzyl-1,7-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1H-pyrrolo[2,3-d]pyrimidine-6-carboxylic acid benzothiophene-5-ylmethyl ester;~~

~~3-Benzyl-1-dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-1H-pyrrolo[2,3-d]pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl ester;~~

~~3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-furo[2,3-d]pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl ester; and~~

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzothiophene-6-ylmethyl ester.

**Claim 19 (currently amended).**A compound according to ~~Claim 1~~Claim 53, or a pharmaceutically acceptable salt thereof, selected from:

3-(3-Methoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Chloro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Fluoro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Chloro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(2-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(4-methyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Carboxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(3-trifluoromethyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

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- 3-Biphenyl-4-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(2-trifluoromethyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(3-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(2-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(4-trifluoromethyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-[2-Hydroxy-3-(naphthalen-1-yloxy)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(3-Chloro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-3-naphthalen-1-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(6-Chloro-benzo[1,3]dioxol-5-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(4-oxo-4-thiophen-2-yl-butyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-pyridin-4-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(4-*m*-tolylloxy-butyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(3,5-Dimethyl-isoxazol-4-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Dioxo-1,3-dihydro-isindol-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-Dihydro-benzo[1,4]dioxin-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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1-Methyl-2,4-dioxo-3-pyridin-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(2,5-Dimethoxy-phenyl)-2-oxo-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzoyloxymethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-*m*-tolylloxy-butyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(2-phenylmethanesulfonyl-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Amino-6-phenylamino-[1,3,5]triazin-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[4-(4-Fluoro-phenyl)-4-oxo-butyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[4-(1,3-Dioxo-1,3-dihydro-isoindol-2-yl)-butyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-phenoxy-butyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-oxo-4-phenyl-butyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(2-phenoxy-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-{3-[4-(3-Chloro-phenyl)-piperazin-1-yl]-propyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[1-Bromo-2-(1H-indol-3-yl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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3-(2-Benzenesulfinyl-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[3-(3-Fluoro-phenylcarbonyl)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-[2-(2-trifluoromethyl-phenylcarbonyl)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(4-Methoxy-phenyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(4-Chloro-2-nitro-phenoxy)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(5-nitro-furan-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1-Benzyl-1*H*-imidazol-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[3-(Benzyl-methyl-amino)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(Bis-trifluoromethyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[3-(2-Bromo-4-methyl-phenoxy)-propyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzenesulfonylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[2-(4-Chloro-benzenesulfonyl)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzo[1,3]dioxol-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Iodo-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Acetoxy-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-[1,2,3]thiadiazol-4-yl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(5-Methoxycarbonyl-furan-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Carboxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(3-pyrrol-1-yl-propyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Carboxy-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Cyano-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Ethoxycarbonyl-furan-2-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Amino-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Cyano-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Hydroxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Carboxy-hexyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(2,2,2-trifluoro-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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- 1-Methyl-2,4-dioxo-3-(2,2,2-trifluoro-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxyl carboxylic acid benzyl ester;
- Iodomethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(2-Fluoro-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- Methyl-2,4-dioxo-3-(tetrahydro-furan-2-ylmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-[1-(4-Carboxy-phenyl-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(Hex-5-enyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(2-Ethyl-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-(2,2,2-trifluoro-ethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxyl pyrimidine acid benzyl ester;
- 3-(Diethoxy-phosphorylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-But-2-ynyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- Bromo-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid;
- 1-Methyl-2,4-dioxo-3-[2-(tetrahydro-pyran-2-yloxy)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 1-Methyl-2,4-dioxo-3-propyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;
- 3-(2-Acetoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid;
- 3-Butyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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3-Isobutyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Ethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Bromo-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Ethylamino-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Cyclobutylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-((R)-3-Hydroxy-2-methyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Hydroxy-butyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Ethoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Isobutyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Chloro-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(3-methyl-but-2-enyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Allyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2,2-Dimethoxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-oxiranylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;



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1-Methyl-2,4-dioxo-3-propyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzo[1,2,5]oxadiazol-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3-Hydroxy-2,2-dimethyl-propyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2-Carboxy-ethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Propyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-sulfamoyl-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(4-methylsulfamoyl-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Dimethylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methanesulfonylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[4-(Methanesulfonyl-methyl-amino)-benzyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Acetylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-[4-(Acetyl-methyl-amino)-benzyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Dimethylamino-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-(4-methylamino-benzyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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3-(4-Carbamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Dimethylcarbamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Carboxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methoxycarbonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-{4-[Bis-(2-hydroxy-ethyl)-amino]-benzyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(3,5-Dimethoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-*tert*-Butyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Methanesulfonyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-[1,3,4]thiadiazol-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Isloxazol-3-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Oxazol-2-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-thiazol-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Imidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1-Methyl-1*H*-imidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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3-(1-Methyl-1*H*-pyrrol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-(1*H*-pyrrol-2-ylmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-(1*H*-pyrrol-2-ylmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-thiophen-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-[1,2,3,4]tetrazin-5-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-[1,2,4,5]tetrazin-3-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1-Methyl-piperidin-4-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-pyrimidin-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-(2*H*-pyran-2-ylmethyl)-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Imidazo[4,5-*b*]pyridin-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Benzoimidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzo[*b*]thiophen-2-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

2,4-Dioxo-3-quinolin-2-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(2*H*-Chromen-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Benzoimidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

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3-(1-Methyl-1*H*-benzoimidazol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-(1*H*-Indol-2-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid furan-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-ethyl-propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1,1-dioxo-tetrahydro-1<sup>6</sup>-thio-phen-3-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-hydroxy-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-oxy-pyridin-4-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid but-3-enyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-diethylamino-propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-cyano-1-phenyl-methyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-amino-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-oxy-pyridin-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-ethoxy-ethyl ester;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid thiophen-2-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,6-dichloro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid dimethylamino-methyl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,2-diphenyl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-pyridin-2-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-ethanesulfonyl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid diethylamino-methyl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid dimethylamino-methyl-propyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-(2-chloro-phenoxy)-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-(2-ethoxy-ethoxy)-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-hydroxy-benzyl ester;
- 1-Methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-morpholin-4-yl-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-(1,3-dioxo-1,3-dihydro-indol-2-yl)-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,3-dihydro-benzo[1,4]dioxin-2-ylmethyl ester;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-methyl-piperidin-4-yl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-(4-hydroxy-phenyl)-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-cyano-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid hexyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-fluoro-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-hydroxy-6-methyl-pyridin-3-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-benzylloxy-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-methoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-methoxy-benzyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,2,2-trifluoro-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,2,2-trichloro-ethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid pyridin-3-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-pyridin-3-yl-propyl ester;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-phenoxy-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1,3-dimethyl-butyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-methyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-phenyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-benzyl-piperidin-4-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid propyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid methyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-trifluoromethyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-*p*-tolyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid tetrahydro-furan-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid octahydro-inden-5-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-amino-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-aziridin-1-yl-ethyl ester;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methyl-but-2-enyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid trifluoro-trifluoromethyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid phenethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-methoxy-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid biphenyl-4-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-chloro-6-fluoro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid tetrahydro-pyran-4-yl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-ethyl-oxetan-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid butyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-(2-hydroxy-phenyl)-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-(4-fluoro-phenyl)-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyclopropylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-ethyl-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (S)-1-phenyl-ethyl ester;



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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,6-difluoro-benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyclobutyl methyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-pyridin-4-yl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-hydroxy-cyclopentyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1-pentafluorophenyl-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-benzoyloxycarbonylamino-ethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid ethyl ester;

2-{{1-(3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidin-6-yl)-methanoyl]-amino}-3-phenyl-propionic acid methyl ester;

(3-{{1-(3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidin-6-yl)-methanoyl]-amino}-propyl)-carbamic acid *tert*-butyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzofuran-5-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzofuran-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid thiophen-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3H-[1,2,3]oxathiazol-5-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3H-[1,2,3]oxathiazol-5-ylmethyl ester;

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3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [1,4,2]dioxazol-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [1,4,2]dioxazol-3-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid furazan-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid furazan-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [1,2,4]oxadiazol-5-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [1,2,4]oxadiazol-5-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3*H*-[1,2,3]triazol-4-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3*H*-[1,2,3]triazol-4-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-[1,2,4]triazol-3-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-[1,2,4]triazol-3-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid isoxazol-5-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid isoxazol-5-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid oxazol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid oxazol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid isothiazol-5-ylmethyl ester;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid isothiazol-5-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid thiazol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid thiazol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-imidazol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-imidazol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-pyrazol-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-pyrazol-3-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-pyrrol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-pyrrol-2-ylmethyl ester;

3-Furazan-3-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-chromen-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-thiochromen-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2*H*-thiochromen-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [1,3,4]thiadiazol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [1,3,4]thiadiazol-2-ylmethyl ester;

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3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-benzoimidazol-5-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-benzoimidazol-5-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-benzoimidazol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-benzoimidazol-2-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-indol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-indol-2-ylmethyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-indol-5-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 1*H*-indol-5-ylmethyl ester;

3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,3-dihydro-benzofuran-5-ylmethyl ester; and

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2,3-dihydro-benzofuran-5-ylmethyl ester.

**Claim 20 (currently amended).**

The compound according to Claim 1

Claim 53, selected from:

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (2-pyridin-4-yl-ethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (2-morpholin-4-yl-ethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-methyl-benzylamide;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid *sec*-butylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyclopentylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyclopropylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyanomethyl-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyclohexylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methyl-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (3-ethoxy-propyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-chloro-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-methyl-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (2,2-diphenyl-ethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (pyridin-3-ylmethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid cyclopropylmethyl-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (1-ethyl-pyrrolidin-2-ylmethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (pyridin-2-ylmethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [2-(3,4-dimethoxy-phenyl)-ethyl]-amide;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (furan-2-ylmethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-fluoro-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (2-bromo-ethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-sulfamoyl-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid phenethyl-amide;
- (S)-2-{{[1-(3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidin-6-yl)-methanoyl]-amino}-propionic acid;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (1-phenyl-ethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 2-methoxy-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid 3-bromo-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [2-(4-sulfamoyl-phenyl)-ethyl]-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid (3-imidazol-1-yl-propyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-*d*]pyrimidine-6-carboxylic acid [2-(2-methoxy-phenyl)-ethyl]-amide;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-trifluoromethyl-benzylamide;  
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-amino-benzylamide;  
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(4-fluoro-phenyl)-ethyl]-amide; and  
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid ((R)-2-hydroxy-1-methyl-ethyl)-amide.

**Claim 21 (currently amended).**The compound according to **Claim 1**Claim 53, or a pharmaceutically acceptable salt thereof, selected from:

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid methyl ester;  
3-(4-Bromo-benzyl)-5-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;  
3-(4-Fluoro-benzyl)-5-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;  
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl ester;  
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzo[b]thiophen-2-ylmethyl ester;  
3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 1-methyl-1H-indol-5-ylmethyl ester;  
3-Benzyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid thiophen-3-ylmethyl ester;  
3-1,3-Benzodioxol-5-ylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;  
1-Methyl-2,4-dioxo-3-pyridin-4-ylmethyl-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

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3-(4-tert-Butyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3,4-Dichloro-benzyl)-5-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-2,4-dioxo-3-(4-trifluoromethoxy-benzyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

1-Methyl-3-naphthalen-2-ylmethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(4-Cyano-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzofuran-5-ylmethyl ester;

3-(3,5-Dimethoxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-(3,5-Dinitro-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid benzyl ester;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid; and

3-(4-Carboxy-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-ethoxy-benzyl ester.

**Claim 22 (currently amended).**

The compound according to Claim 1

Claim 53, or a pharmaceutically acceptable salt thereof, selected from:

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(3,4-dimethoxy-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-amino-benzylamide;



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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(4-chloro-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (biphenyl-2-ylmethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,4-dimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-pyridin-4-yl-ethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-difluoromethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(3-ethoxy-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-chloro-4-fluoro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,4-dichloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-phenyl-propyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,4,5-trimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-chloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,5-dimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,3-dimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-trifluoromethyl-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-methoxy-benzylamide;

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- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-methyl-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (4-phenyl-butyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (pyridin-3-ylmethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid ((S)-2,2-dimethyl-4-phenyl-1,3-dioxinan-5-yl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(3-methoxy-phenyl)-ethyl]-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (thiophen-2-ylmethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2-chloro-benzylamide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (5-methyl-furan-2-ylmethyl) amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2,2-diphenyl-ethyl)-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(2-methoxy-phenyl)-ethyl]-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(3-trifluoromethyl-phenyl)-ethyl]-amide;
- 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-bromo-benzylamide;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(1H-indol-3-yl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,5-dichloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid indan-1-ylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (furan-2-ylmethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(4-methoxy-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 2,4-dimethoxy-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-chloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (1-phenyl-ethyl)-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3,4-dichloro-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-fluoro-3-trifluoromethyl-benzylamide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-pyridin-2-yl-ethyl)-amide

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(2,4-dimethyl-phenyl)-ethyl]-amide;

3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid [2-(2,4-dichloro-phenyl)-ethyl]-amide;

1,3-Dimethyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-Cyanomethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

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3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(4-Cyclopropylsulfamoyl-benzyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(6-nitro-pyridin-3-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-(6-nitro-pyridin-3-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

1-Methyl-3-(6-nitro-pyridin-3-ylmethyl)-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

3-Cyclohexylmethyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid (2-methoxy-pyridin-4-ylmethyl)-amide;

3-{2-[(1H-Benzimidazole-5-carbonyl)-amino]-ethyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-[2-(3-piperidin-1-yl-propionyl-amino)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[(6-pyrazol-1-yl-pyridine-3-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[2-(4-Diethylamino-benzoylamino)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

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3-{2-[(6-Chloro-pyridine-3-carbonyl)-amino]-ethyl}-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[(1H-pyrrole-2-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-[2-(2-Dimethylamino-acetylamino)-ethyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[(pyrazine-2-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-3-[2-(2-methyl-2-methylamino-propionylamino)-ethyl]-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[(pyrrolidine-2-carbonyl)-amino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[3-(5-phenyl-1H-pyrrol-2-yl)-propionylamino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-{2-[2-(pyridin-4-ylsulfanyl)-acetylamino]-ethyl}-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

3-(6-Amino-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxy-benzylamide;

1-Methyl-2,4-dioxo-3-(3-phenyl-prop-2-ynyl)-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxy-benzylamide;

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3-(6-Amino-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxybenzylamide;

3-(6-Amino-pyridin-3-ylmethyl)-1-methyl-2,4-dioxo-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid pyridin-4-ylmethyl)-amide;

1-Methyl-2,4-dioxo-3-[2-(pyridin-2-ylamino)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxybenzylamide;

1-Methyl-2,4-dioxo-3-[2-(pyrimidin-2-ylamino)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 4-methoxybenzylamide; and

1-Methyl-2,4-dioxo-3-[2-(pyrimidin-2-ylamino)-ethyl]-1,2,3,4-tetrahydro-thieno[2,3-d]pyrimidine-6-carboxylic acid 3-methoxybenzylamide.

**Claim 23 (currently amended).**

A pharmaceutical composition, comprising a compound of ~~Claim 1~~ Claim 53, or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier, diluent, or excipient.

**Claim 24 (original).**

A pharmaceutical composition, comprising a compound of Claim 2, or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier, diluent, or excipient.

**Claims 25-32 (cancelled).****Claim 33 (currently amended).**

A method for treating a heart failure, comprising administering to a patient suffering from such a disease an effective amount of a compound of ~~Claim 1~~ Claim 53, or a pharmaceutically acceptable salt thereof.

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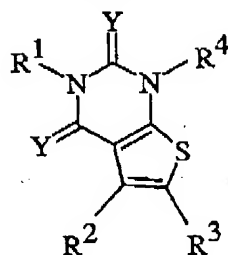
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Claims 34-41 (cancelled).

Claim 42 (original).

A compound of Formula II



II

wherein:

each Y independently is O or S;

 $R^1$ ,  $R^4$ , and  $R^5$  independently are hydrogen,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl, $C_2$ - $C_6$  alkynyl,  $(CH_2)_n$  cycloalkyl,  $(CH_2)_n$  heterocyclic, $C_1$ - $C_6$  alkanoyl,  $(CH_2)_n$  aryl, or  $(CH_2)_n$  heteroaryl; $R^2$  and  $R^3$  independently are hydrogen, halo,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl, $C_2$ - $C_6$  alkynyl, CN,  $NO_2$ ,  $NR^4R^5$ ,  $(CH_2)_n$  cycloalkyl,  $(CH_2)_n$ aryl, or  $(CH_2)_n$  heteroaryl;

n is 0, 1, or 2;

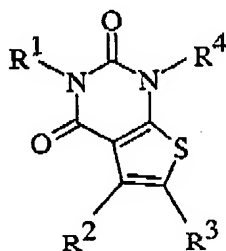
 $R^4$  and  $R^5$  when taken together with the nitrogen to which they are

attached complete a 3- to 8-membered ring optionally containing

O, S, or N, and substituted or unsubstituted.

Claim 43 (previously presented).

A compound of Formula III



III

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wherein:

R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> independently are hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> heterocyclic, C<sub>1</sub>-C<sub>6</sub> alkanoyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

R<sup>2</sup> and R<sup>3</sup> independently are hydrogen, halo, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, CN, NO<sub>2</sub>, NR<sup>4</sup>R<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

n is 0, 1, or 2;

R<sup>4</sup> and R<sup>5</sup> when taken together with the nitrogen to which they are attached complete a 3- to 8-membered ring optionally containing O, S, or N, and substituted or unsubstituted.

**Claims 44-45 (cancelled).****Claim 46 (currently amended).**

A pharmaceutical composition

comprising a compound of ~~Claim 41~~ Claim 54, together with a pharmaceutically acceptable carrier, diluent, or excipient.

**Claim 47 (original).**

A pharmaceutical composition comprising a

compound of Claim 42 together with a pharmaceutically acceptable carrier, diluent, or excipient.

**Claims 48-52 (cancelled).****Claim 53 (new).**

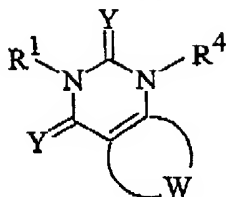
A compound of Formula I



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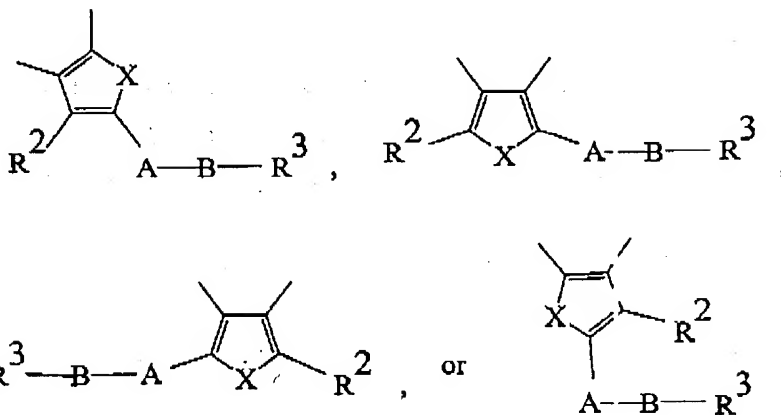


I

or a pharmaceutically acceptable salt thereof;

wherein:

W, together with the carbon atoms to which it is attached, form a 5-membered ring diradical



A is  $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$  or  $\begin{array}{c} (\text{O})_{0-2} \\ \parallel \\ -\text{S}- \end{array}$ ;  
 B is O or NR<sup>5</sup>; or

A and B are taken together to form  $-\text{C}\equiv\text{C}-$ ;

X is S;

each Y independently is O or S;

R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> independently are hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl,

C<sub>2</sub>-C<sub>6</sub> alkynyl, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> heterocyclic,

C<sub>1</sub>-C<sub>6</sub> alkanoyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

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$R^2$  and  $R^3$  independently are hydrogen,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, CN,  $NO_2$ ,  $NR^4R^5$ ,  $(CH_2)_n$  cycloalkyl,  $(CH_2)_n$  aryl, or  $(CH_2)_n$  heteroaryl;

$R^2$  may further be halo;

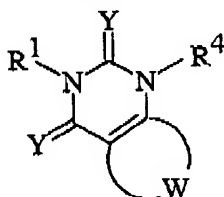
$n$  is an integer of from 0 to 5; and

$R^4$  and  $R^5$  when taken together with a nitrogen to which they are both attached complete a 3- to 8-membered ring containing carbon atoms and optionally containing O, S, or N, and substituted or unsubstituted;

with the proviso that  $R^1$  and  $R^3$  are not both selected from: hydrogen and  $C_1$ - $C_6$  alkyl.

**Claim 54 (new).**

A compound of Formula I



and the pharmaceutically acceptable salts thereof;

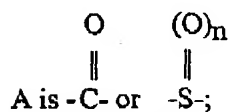
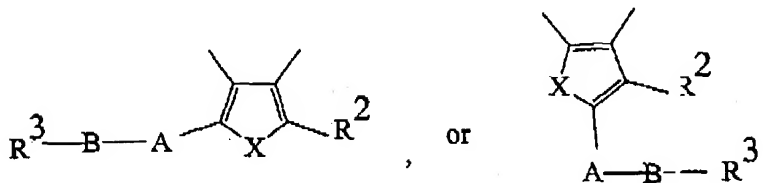
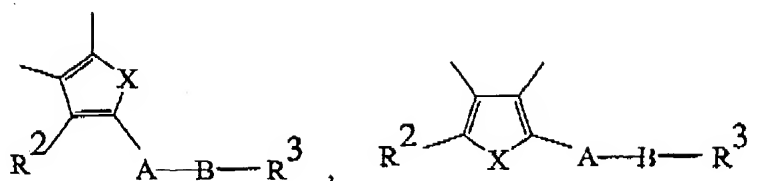
wherein:

W is

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B is O or NR<sup>5</sup>;

X is S;

each Y independently is O or S;

R<sup>1</sup>, R<sup>4</sup>, and R<sup>5</sup> independently are hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl,C<sub>2</sub>-C<sub>6</sub> alkynyl, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub> heterocyclic,C<sub>1</sub>-C<sub>6</sub> alkanoyl, (CH<sub>2</sub>)<sub>n</sub> aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;R<sup>2</sup> and R<sup>3</sup> independently are hydrogen, halo, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl,C<sub>2</sub>-C<sub>6</sub> alkynyl, CN, NO<sub>2</sub>, NR<sup>4</sup>R<sup>5</sup>, (CH<sub>2</sub>)<sub>n</sub> cycloalkyl, (CH<sub>2</sub>)<sub>n</sub>aryl, or (CH<sub>2</sub>)<sub>n</sub> heteroaryl;

n is 0, 1, or 2;

R<sup>4</sup> and R<sup>5</sup> when taken together with the nitrogen to which they are

attached complete a 3- to 8-membered ring optionally containing

O, S, or N, and substituted or unsubstituted.